Work Ordei May-01-13 7:28:		10882		*100		·		Page	age 1			
tem ID: I Revision ID:	03021-041	7 - 7 <del>-</del>	TELTS - 113 - ELL -	Accept	*N900	<b>040</b>	100	)* s	etup Star	1.71	S1*	_
tem Name: T	ube Assemb	ly							Stop	*N	S2*	
Start Date: 4	/30/13	Start Qty: 1.00	*1*		Cust Item I	Đ:						
Required Date: 4	/30/13	Req'd Qty: 1.00	*1*		Customer:							
Reference:			•		i							
Approvals:	 Process Pla	an: <u>Mしろ</u>	Date: 13-05-0	3 Tooling:	, D:	ate:	•	R	tun Star	171	R1*	
	QC:		Date:	SPC (Y/N):	D:	ate:			Stop	*N	R2*	
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	-
Draw Nbr	Re	vision Nbr	. <u></u>									
D3021	В											
100			,	0.00			· <b></b>				<del></del>	•
*100*		Large Fab			ł			/_	E	13-	8-15-	-
Large Fab		Memo		0.00	1			,				
Large Fab		I-Cut tube a	as per Dwg D3021		4							
		2-Drill tube	as per Dwg D302! using	DT8622	1							
		3-Deburr			, i							
		4-Weld as p A/R 4130	oor Dwg D3021 QSI004 Rod Batch: /*// §	1875								
110		QC9- Inspect visual per	QSI004- Fusion Welds	0.00								
*110*					Ì			$\sigma$	13-01	2 15	0AS - <b>09</b> -	
QC		Memo		0.00				<u> </u>	.1.5-0	⊃,- 'I 2'	09	

Quality Control

											DQA:	Date	:
NCR: Y	es ,	/ No				WORK ORDER NON-	COI	<b>VFORM</b>	MANCE / UPDATE		·		
											A Closed:	Date	:
Nork Orde	ř.					DISPOSITION			AGAINST	Γ DEPA	ARTMENT	PROCESS	
TOTA OTUC	' ·					Rework	7		Skid-tube Crosstube			Water Jet	Engineering
Part N	o.					Scrap	1		Machining Small Fat	$\blacksquare$	Proc	d. Eng. Coor.	Quality
	_					Use-as-is	1		noforming Finishing	-		e/Packaging	Other
NCR N	o.					Work Order Update	1		Large Fab Composite	ъ		Supplier	1
							-						
Root					Descr	iption of work order update	I	nitial	Action		Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
oc/Data													
quip/Tooling	_		ŀ										
perator	_							:			Ì		
faterial	_						ĺ						
etup	_												
ther [	_	İ											
rocess							•						
upplier	-												
raining .	-												
napproved		i					 :A111	T CATE	L	L_			<u> </u>
Landin	ıa Ge					General '	AUL	CAIL			**************************************		<u> </u>
	_	Bending			Г	Bend		Grain			valized		Pressure/Forced
	_	Centre No	t Concer	ntric to (	o/s	BOM/Route	$\vdash$	Hardwa	re	$\vdash$	ver/Under	tolerance	Temperature/Cure
Ì	—	Cracks			·  -	Broken/Damaged		l	on Incomplete	-	art incorrec	<del> </del>	Weld
Ì	_	Crushed/C	rimped		-	Burrs			ions Incomplete/Unclear	∏ <sub>P</sub>	art Lost/Mi	ssing	Wrong Stock Pulled
ľ	_	Cuffs	•			Contamination		Mainte	nance	∏₽	art Moved		_
64	٦,	Heat Treat	t			Countersink		Mislabe	led	ПР	ositioned W	/rong	
<u>``</u>	i	nspection	Strip in	Tube		Cut Too Short		Misread	I	Р	ower Loss/	Surge	Other
Ī	_	Ripples in				Drill Holes		Offset					
Ī	T	Torque W	aves in E	xtrusio	n [	Drawing		Out of 0	Calibration				
[	r	Turning Se	equence			Finish		Out of 9	Sequence				
	١V	Nave/Twi	ist in Tub	e	Г	Folio		Outside	Dimensions				

0.00

Memo

Quality Control

NCR:	Yes / No	WORK ORDER NON-C	CONFORMANCE / UPDATE
Work O	order:	DISPOSITION	AG
		Rework	Skid-tube Cros

Qty

Step

Centre Not Concentric to O/S

	DQA:	D	ate:	~
	QA Closed:	D	ate:	
DE	PARTMENT	/PROCESS		
		Water Je d. Eng. Coor re/Packaging Supplie		Engineering Quality Other
	Sign & Date	Verification	on .	QC Inspector
	Ovalized Over/Under Part Incorred Part Lost/Mi	ct		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
_	Part Moved Positioned V	-		Other
1	Power Loss/	ourge		Jourer

**AGAINST** 

Crosstube

Small Fab

Finishing

Composite

Action

Description

Machining

Large Fab

Thermoforming

Initial

Chief Eng

**FAULT CATEGORY** 

Grain

Hardware

Maintenance

Out of Calibration
Out of Sequence

**Outside Dimensions** 

Mislabeled

Misread

Offset

inspection incomplete

Instructions Incomplete/Unclear

Scrap

Use-as-is

Work Order Update

General

Bend

Burrs

BOM/Route

Contamination

Countersink

Cut Too Short Drill Holes

Drawing

Finish

Folio

Broken/Damaged

Description of work order update

or Non-conformance

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Part No.

NCR No.

**Landing Gear** 

Bending

Cracks

Cuffs

Heat Treat

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Date

Root

Cause
Doc/Data
Equip/Tooling
Operator
Material
Setup
Other
Process
Supplier
Training
Unapproved

<b>Work Ord</b> <i>May-01-13 7:2</i>	28:15 AM			*100	882* Page 3
Item ID: Revision ID: Item Name:	D3021-041 Tube Assemb		<del>1.5</del>	Accept	*N900040100* Setup Start *NS1* Stop *NS2*
Start Date: Required Date Reference:	4/30/13 e: 4/30/13	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item ID: Customer:
Approvals:	Process Pl	<del>-</del> -	Date:	Tooling: SPC (Y/N):	Date: Run Start *NR1* Stop *NR2*
Sequence ID/ Work Center 150 *150*	ID	Operation Description Identify as per dwg & S	tock Location	Set Up/ Run Hours 0.00	Tool ID Tool # Plan Accept Reject Reject Insp. Code Qty Qty Number Stamp
Packaging Packaging		Memo		0.00	
160		QC21- Final Inspection	- Work Order Release	0.00	
*160* QC Quality Control		Memo		0.00	MLJ 13-08-19

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NCR:	/es	/ No				WORK ORDER NON-	100	NFORM	<b>NANCE / UPI</b>	DATE			
						<u> </u>			_		QA Closed:	Dat	e:
Work Orde	er:					DISPOSITION	, .		cui a la C	AGAINST DE	PARTMENT,	/PROCESS  Water Jet	
Part No					Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite		Small Fab Finishing	4	d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other	
Root Cause		Date	Step	Qty		tion of work order update or Non-conformance		Initial nief Eng	Act	ion iption	Sign & Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
							AUL	T CATE	GORY				
Landi		Bending Centre None Cracks Crushed/ Cuffs Heat Trea Inspectio Ripples in	Crimped at n Strip in n Bend	Tube		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Instruct Mainte Mislabe Misread Offset	ion Incomplete ions Incomplete/U enance eled	Jnclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct ssing /rong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
]	$\Box$	Torque V	vaves in t	xtrusio	ո 🗀	Drawing	<u> </u>	Tour or c	Calibration				

Out of Sequence

Outside Dimensions

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

## Picklist Print

May-01-13 7:28:14 AM

Work Order ID:

100882

Parent Item:

D3021-041

Parent Item Name:

Tube Assembly

Comments:

IPP 01.10.23 New Issue SM DD VERFULM

IPP REV:B 12.06.26 DWG PB2

Start Date: 4/30/13

Required Date: 4/30/13

Start Qty: 1.00

Required Qty: 1.00

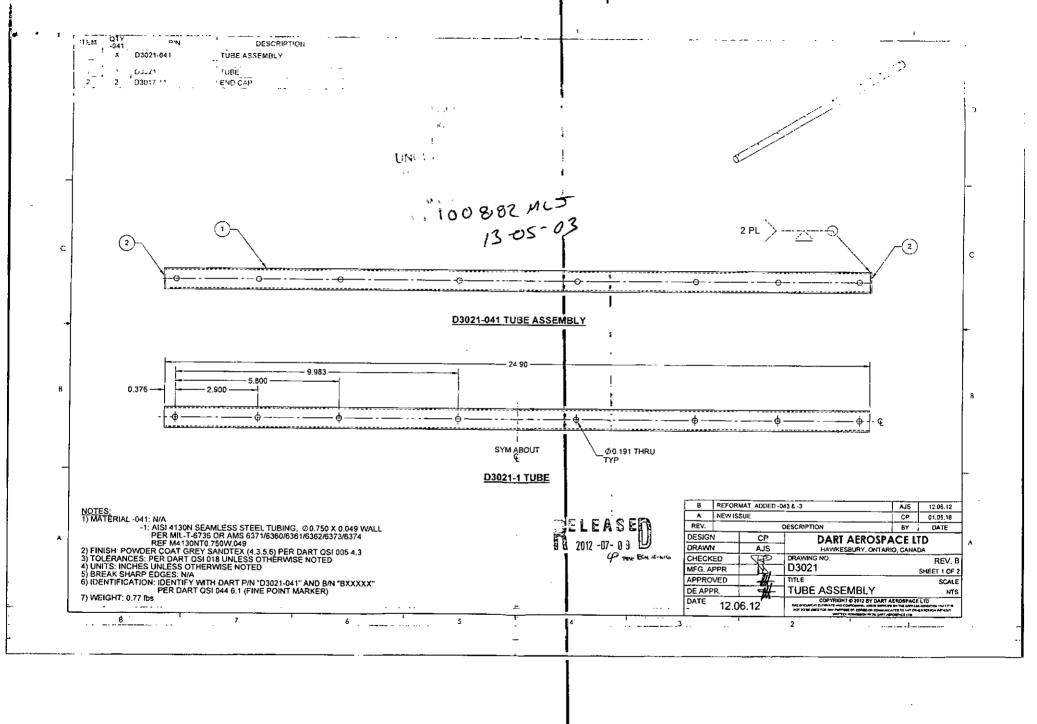
Component Item ID/		DD VERHULM												
D3017-11		Replacement	Mfg/	Bin		Last	-							Status
M4130NT0.750W.049 Purchased No	D3017-11		Manufactured	No			100	Each	19.0000	2	_67 2/.	3 <i>-8-1</i>	<u> </u>	
M4130NT0.750W.049  Purchased No  Location  MAT033  100  Loc Oty  Loc Code  MAT033  123339  124293  125252  48  Loc Code  Loc Code  Loc Code  Loc Code							19		oc Code	-3				
MAT033 224.4267893  123339 6.6217893  124293 5.305  125252 48		W	Purchased	No	<u> </u>	31)		f	224,4268	2.0833	2.19294 42/3	74 3 <i>= 8 = 1</i> _3	<u></u>	
123339 6.6217893									oc Code					
					1233		6.6217 <b>8</b> 93			<u>-</u>				
											2.6/			

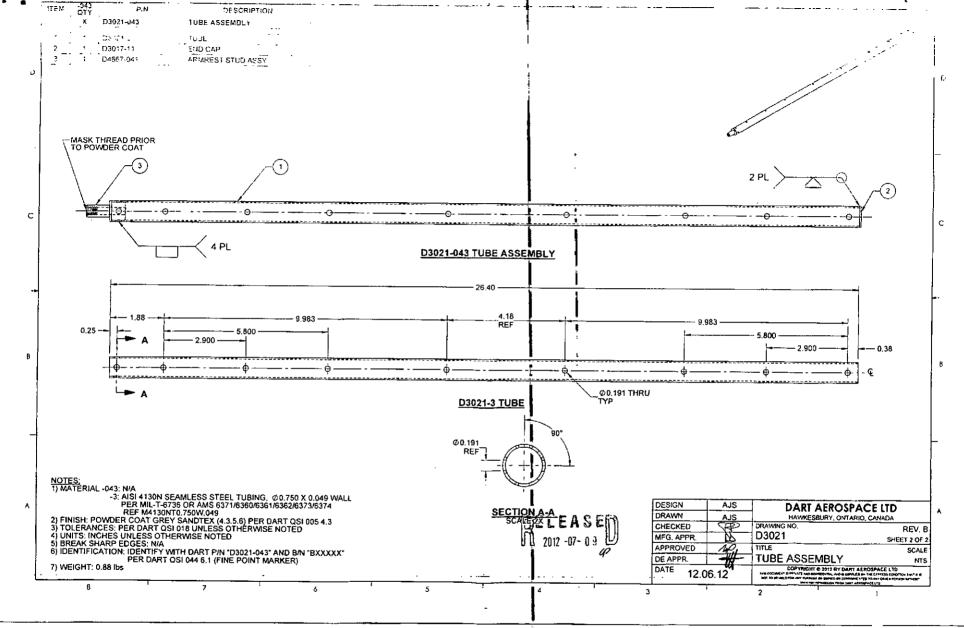
										DQA:	Date:	•	
NCR: Yes	/ No			WO	RK ORDER NON-	COI	NFORM	MANCE / UF	PDATE	QA Closed:	Date:		
Work Order:	··· <del>-</del>	<del></del>			DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	<del>-</del>	
Part No. NCR No.				w	Rework Scrap Use-as-is /ork Order Update		Therm	Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
Root				Description of	work order update	T	Initial	A	ction	Sign &			_
Cause	Date	Step	Qty	or Non-c	onformance	Ct	nief Eng	Desc	cription	Date	Verification	QC Inspecto	r
Doc/Data												•	
Equip/Tooling		Ì				ŀ							
Operator		1	1										
Material													
Setup	]					1							
Other		1											

Landin	g Gear	General	 _				_
	Bending	Bend	Grain		Ovalized	L	Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route	Hardware		Over/Under tolerance		Temperature/Cure
	Cracks	Broken/Damaged	Inspection Incomplete		Part Incorrect		Weld
[	Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	L.	Part Lost/Missing		Wrong Stock Pulled
	Cuffs	Contamination	Maintenance		Part Moved		
	Heat Treat	Countersink	Mislabeled	L	Positioned Wrong		_
	Inspection Strip in Tube	Cut Too Short	Misread		Power Loss/Surge		Other
Γ	Ripples in Bend	Drill Holes	Offset				
	Torque Waves in Extrusion	Drawing	Out of Calibration				
	Turning Sequence	Finish	Out of Sequence				
- [	Wave/Twist in Tube	Folio	Outside Dimensions				

**FAULT CATEGORY** 

Process Supplier Training Unapproved





4.	•	•	

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